Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

May 30, 2002

TO: Minerals File

FROM: Tom Munson, Senior Reclamation Specialist

RE: Site Inspection, BEG Resources, LLC, Travertine #1 Mine, M/023/042, Juab County, Utah

Date of Inspection: May 9, 2002
Time of Inspection: 10:00 a.m.
Conditions: Sunny
Participants: Tom Munson, DOGM

Purpose of Inspection: To inspect the regarding and seeding work accomplished to date

Observations:

Arriving onsite, it was obvious (see the attached photos), that the earthwork had been completed. It had been ripped along the contour with a dozer and left in a roughened state. The following information was not ascertained at the time of inspection other than the site had been seeded by Mr. Steele prior to some previous rain storms. There was some evidence of sprouting grasses, but no species could be identified at this early stage of growth.

When I arrived onsite, I GPS'ed the disturbance that had been regraded to determine what bond money could be released and what bond money would need to be retained. I also needed to research the mine plan to determine what was committed to in regards to reclamation (i.e. seeding and soil amendments) for the site. The attached seed mix will have to be verified. Because the site was seeded late in the Spring it may be necessary to reseed again this fall. Another issue which comes to light after reviewing the plan was the proposed use of manure. The plan proposed the use of 4-5 tons/acre of composted manure as an amendment to the soil. There was no evidence of any manure being applied on site.

Based on the site inspection and the research of the mine plan commitments. The following reclamation bond money will need to be withheld to assure the success of the reseeding.

1.) Application of Manure	9 acres x 300/acre	$2700.00
2.) Ripping	9 acres x 224/acre	$2016.00

3.) Reseeding	9 acres x 135/acre	$1215.00
4.) Mob/demob		$2000.00
	Total amount to be withheld	**$7931.00**
+10% Contingency		$793.00
+2.82% Escalation for 3 years		$759.00
Total Bond Amount Escalated to Year 2005		**$9,483.00**
	Rounded Dollar Amount	**$9,500.00**

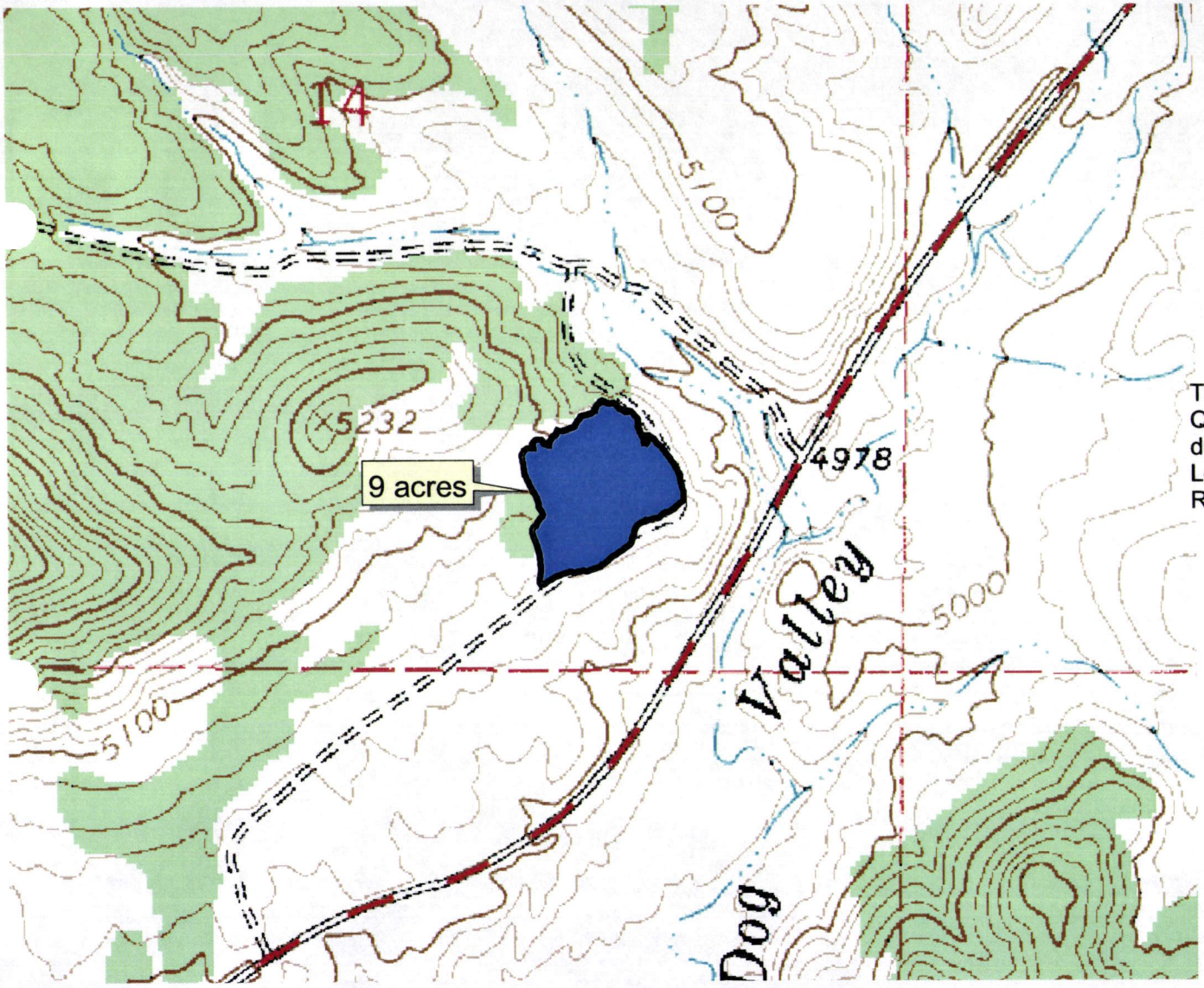
Since this site was seeded at a very questionable time to assure success (i.e. late in the spring of the year) and not all the commitments in the reclamation plan were met, it becomes necessary for the Division to withhold this money until the site can released for 70 percent vegetative success.

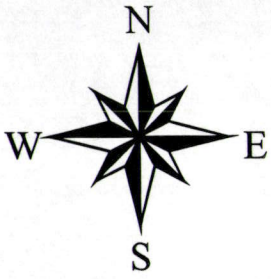
Conclusions and Recommendations:

1.) Retain the necessary money to mobilize/demobilize, rip, apply manure, and reseed the 9 acres currently disturbed.
2.) Return the remainder of the bond money for the regrading portion of the bond when a formal request is received.
3.) Recommend to the operator that reseeding be carried out late this fall, prior to winter, to take advantage of the soil moisture, if the current seeding proves to be unsuccessful.

jb
Attachments: Seedmix and Mine Plan Commitments, photos,
GPS map of disturbance
cc: Gary Burningham, BEG Resources, LLC
Jerry Mansfield, Fillmore BLM
O:\M023-Juab\S0230042begtravertine\final\050902ins.doc

Travertine #1
BEG Travertine, L.L.C.
M023/042





This site is found on the Champlin Peak Quadrangle(Q2217). All GPS data was collected during a site inspection on 5/9/2002
Location : S 1/2 of SE1/4 Of Section 14, T14S, R3W

Regraded Mine Site

2000 0 2000 Feet

This product may not meet DOGM standards for accurracy and content. different data sources and input scales may cause some misalignment of data layers.

TABLE 14.1
BR SURETY ESTIMATES

Item	Subgroup	1996 Reference	1998 Unit Cost	Cost Unit per	Variable 1	Variable 1 Units	1998 Cost
Regrading	Pit and operation areas	Means, 022-200-242-4000	$0.98	yd3	500	yds	$490
Topsoil distribution	Pit and operation areas	NOI Section 14.3	$0.84	yd3	2300	acre	$1,932
Ripping	Pit, operation area, and utility road	NOI Section 14.6	$224.00	acre	7.63	acre	$1,709
Mulch	Pit, operation area, and utility road	NOI Section 14.4	$30.00	acre	7.63	acre	$229
Seeding	Seeding (seed cost plus application)	NOI Section 14.5	$135.00	acre	7.63	acres	$1,030
Cleanup	General Site Cleanup Equipment Salvage Trucking FEL with Supervisor	NOI Section 14.8 NOI Section 14.8 Means, 016-400-408-4760	$30.00 $40.00 $897.50	hour hour day	32 25 2	Hours hours days	$960 $1,000 $1,795
Dozer Mobilization (demob included)	Miscellaneous Supervision	NOI Section 14.6	$500.00	lump			$500
Escalation estimated for a five year period at a rate of 2.24%						Subtotal	$9,645
						Add 10% cont	$10,610
						Escalation	$11,852
						Rounded	$11,900

14.0 Surety

14.1 Gates and Signs

The mining plan consist of removal of a limestone outcropping. Highwalls are of minimal height during operations, and will not exist upon cessation of activities. Therefore no gates and/or signs are necessary.

14.2 Regrading - Loose Material

Nearly all loose material generated from operations will be sold. There is no reject material to be stockpiled. It is estimated that up to 500 yds of loose material will be available for regrading and used to form 3:1 or flatter slopes, where possible. The regrading of material would be completed with a dozer. All pushes would be less than 50'. The cost for regrading is estimated using the Means Construction Cost Data, reference 022-200-242-4000, at $0.98 per yard. Note that this method of cost estimating includes an operator.

14.3 Distribution of Topsoil

Topsoil will removed from the topsoil stockpile and redistributed over the mined area and the portion of the operations area to be reclaimed (excluding access road). The topsoil distribution would be completed with a dozer, assumed to be a Caterpillar D8. The average push distance is estimated at 200'. The volume of topsoil to be redistributed is estimated at 2500 tons (2300 yds^3). The cost of topsoil distribution is estimated using Caterpillar Blue Book Rental Rates, April 1997, and Means Construction Cost Data for operator cost, crew B-10-B. The estimated cost is $0.84/$yd^3$.

14.4 Mulch

Manure will be used as a mulch and to provide organic material. The manure will be applied at a rate of 4-5 tons per acre. The cost of manure is estimated to be negligible and expected to be available in nearby Leamington. It is estimated that the total cost for the manure and application will be $30 per acre.

14.5 Seeding

Seeding will be completed using hand broadcasting. The total cost for the seed mix described in Section 7.2 is estimated at $105 per acre. The seed mix may be hand broadcast at a rate of 1 acre per hour, at a cost of $30 dollars per hour. The total cost is estimated at $135 per acre.

14.6 Ripping

Ripping of seeded areas will be completed with a dozer. For surety estimates, it is assumed that ripping will be completed with Caterpillar D8. Using estimating parameters contained in Section 14.2, with an estimated ripping depth rubble at a depth of 18", at a rate of 1 mile per hour, the cost of ripping is estimated at $224 per acre.

14.7 Dozer Mobilization

The only site equipment to be mobilized, which is not otherwise included in the unit cost, is the Caterpillar D8 dozer used for topsoil redistribution, regrading, and ripping. The dozer is expected to available in nearby Nephi. A mobilization (including demob) cost of equipment is estimated at $500.

14.8 Site Clean-up

Equipment removal. Equipment used for operations include an air track drill, a front end loader, and a crushing screening plant. For surety calculations, it is estimated that this equipment would have a salvage value equal to the disposal cost. No scrap iron value and no disposal fee is included in the surety estimates. The receiving scrap yard is assumed to be located in Nephi, with a round trip travel and unload time of 1 ½ hours. The load time for each trip is estimated at 1 hour. The total time needed for each vehicle trip is 2 ½ hours. The use of a flat bed tractor trailer with operator is estimated at $40 per hour A front end loader would be used to load all scrap equipment and all equipment left on site could be loaded and hauled in two working days. Supervision could be completed by the front end loader operator. This same loader with supervisor would be used for general debris clean-up during slack periods.

The air track and a front end loader would each take one trip (2 trips total), for a total of 5 hours.

The crushing/screening operations are conducted by a contractor. Exact plant layouts could vary. However, a typical plant layout consists of: generator/operator shack (1 trip); a cone crusher (1 trip); a jaw crusher (1 trip); a screening plant (1 trip); six conveyors/radial stackers (2 trips), a water storage tank and a diesel fuel storage tank (1 trip); and a feeder/hopper (1 trip). The total effort needed to remove the crushing/screening plant is eight trips or 20 hours.

General site clean-up. All trash and general debris will be removed from the site. This site clean-up can be completed by supervised labor and a front end loader. It is estimated that site clean-up can be completed within one work day, and the laborers could be supervised by the loader operator. The loader with supervisor would be the same as that used for equipment loading and could complete general site clean-up during periods when a truck is not available to load. The labor cost is estimated at $30 per hour, and that two laborers could complete the clean-up in two working days.

7.0 Vegetation

7.1 Existing Vegetation

Existing vegetation surrounding the Travertine #1 Mine varies. Areas to the north and east were recently burned by wildfire in 1996. Areas to the south and southwest were not burned by the wildfire.

The BLM has conducted a re-seeding program of burned areas which were damaged by the massive fire in 1996. It is not clear if re-seeding was actually completed in areas immediately adjacent to the Travertine #1 mine, however, very good establishment of vegetation in the burned areas is evident. However, since these recently burned areas are not considered representative of vegetation that existed prior to disturbance of mining operations, BR is proposing to re-establish vegetation to a level of ground cover consistent with areas surrounding the pit which were not damaged by the wildfire.

The area identified as representative of pre-mining vegetation is immediately adjacent to the pit and operations area to the southwest. Plate 1 identifies this particular area. The vegetation in this area consists of some mosses which are only expected to be evident in the springtime, dense sage, cryptogam, scattered junipers, and some grasses. The area had a pre-mining use of grazing. It is believed that the grazing has depleted existing vegetative cover, particularly grasses, considerably. The total estimated ground cover in this representative area is estimated to range from 25-45%, with an average of 35%.

7.2 Plan for Re-establishing Vegetation

All re-depositing of top soils and revegetation activities will be conducted in the first spring following cessation of activities at the Travertine #1 mine.

A seed mix will be applied to the areas through the use of a seed drill or hand broadcasting. The following seed mix is proposed:

Table 7.1
Proposed Seed Mix

Common Name	Rate (lbs/acre)
Hycrest crested wheat grass	1.0
Intermediate wheatgrass	2.0
Western wheatgrass	2.0
Indian ricegrass	2.5
Palmer penstemon	0.5
Ladlac alfalpha	1.0
Yellow sweetclover	0.5
Scarlet globemallow	0.5
4-wing saltbrush	1.0
Shadscale	1.0
Rubber rabbitbrush	0.5
Forage kochia	0.5
Total	13.0

Revegetation will be re-established by first spreading topsoil over areas from which it was removed, applying a manure mulch at a rate of four to five tons per acre, ripping, then hand broadcasting the seed mix. It is estimated that ripping can be completed to a depth of 18 inches because much of the material underlying the topsoil will be loose from regrading as well as naturally occurring.

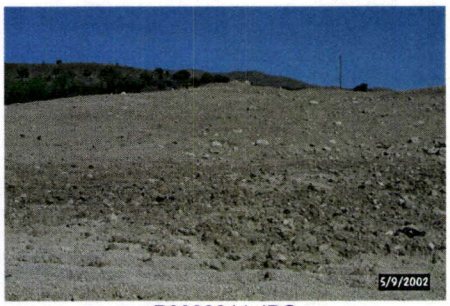
The proposed seed mix was recommended for the Travertine #1 mine by the Division of Oil Gas and Mining. Other seed mixes may be used upon recommendation by the BLM or the Division of Oil, Gas and Mining.

7.3 Vegetation Success Determination

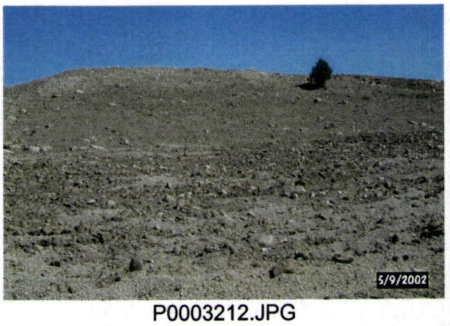
Vegetation success is achieved when re-established vegetation is at least 70% of the pre-disturbed vegetation. Due to previous mining activities at the property and outcropping of limestone, vegetation did not exist over all areas. However, BR is proposing that revegetation is

5/9/2002

TRAVERTINE 1 M/023/042 BE RESOURCES, LLC

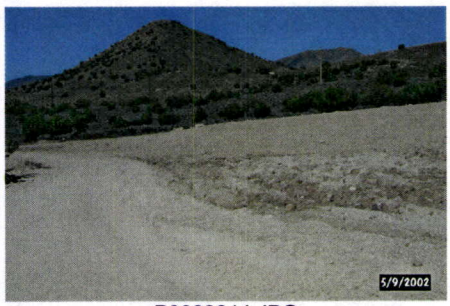


P0003211.JPG
05/09/1902



P0003212.JPG
05/09/1902

P0003213.JPG
05/09/1902



P0003214.JPG
05/09/1902

P0003215.JPG
05/09/1902

P0003216.JPG
05/09/1902

P0003217.JPG
05/09/1902

P0003218.JPG
05/09/1902

P0003219.JPG
05/09/1902

P0003220.JPG
05/09/1902

P0003221.JPG
05/09/1902

P0003222.JPG
05/09/1902

P0003223.JPG
05/09/1902

P0002433.JPG
03/22/1902

P0002434.JPG
03/22/1902

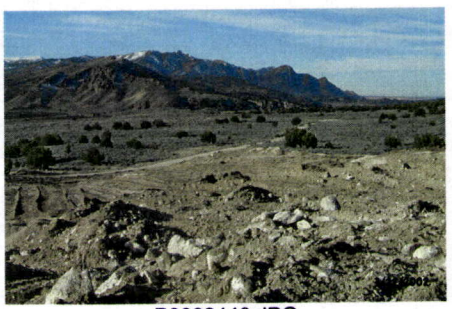
P0002435.JPG
03/22/1902

P0002436.JPG
03/22/1902

P0002437.JPG
03/22/1902

P0002438.JPG
03/22/1902

P0002439.JPG
03/22/1902



P0002440.JPG
03/22/1902

BEG TRAVERTINE
M023/071
3/22/2002